

List of All Chemicals

P Dillenia indica (Dilleniaceae)

How used

Medicinal

*Unless otherwise noted all references are to Duke, James A. 1992. Handbook of phytochemical constituents of GRAS herbs and other economic plants. Boca Raton, FL. CRC Press.

Chemical	Plant Part	Low PPM	High PPM	StdDev	*Reference
BETULIN	Stem Bark	--	--		Jim Duke's personal files.
Activities (13)					
AntiHIV 6.1 uM					
Anticarcinomic					
Antifeedant					
Antiflu					
Antiinflammatory					Recio, M., et al. 1994. Investigations on the Steroidal Anti-Inflammatory Activity of Triterpenoids from <i>Diospyros leucomelas</i> *. <i>Planta Medica</i> , 61: 9.
Antitumor					Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Antiviral 6.1 uM					
Aphidifuge					Lugemwa, F.N., Huang, F-Y., Bentley, M.D., Mendel, M.J., and Alford, A.R. 1990. A <i>Heliothis zea</i> Antifeedant from the Abundant Birchbark Triterpene Betulin. <i>J. Agric. Food Chem.</i> 38(2): 493-494.
Cytotoxic 600 ppm					
Cytotoxic 8.6 uM					
Hypolipemic					
Prostaglandin-Synthesis-Inhibitor IC50=119 uM					Huang, C., Tunon, H., Bohlin, L. 1995. Anti-Inflammatory Compounds Isolated from <i>Menyanthes trifoliata</i> L. <i>Yao Hsueh Hsueh Pao</i> , 30(8): 621-626.
Topoisomerase-II-Inhibitor IC50=38.6 uM					
BETULIN	Leaf	--	1050.0	-0.01	Jim Duke's personal files.
Activities (13)					
AntiHIV 6.1 uM					
Anticarcinomic					
Antifeedant					
Antiflu					
Antiinflammatory					Recio, M., et al. 1994. Investigations on the Steroidal Anti-Inflammatory Activity of Triterpenoids from <i>Diospyros leucomelas</i> *. <i>Planta Medica</i> , 61: 9.
Antitumor					Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Antiviral 6.1 uM					
Aphidifuge					Lugemwa, F.N., Huang, F-Y., Bentley, M.D., Mendel, M.J., and Alford, A.R. 1990. A <i>Heliothis zea</i> Antifeedant from the Abundant Birchbark Triterpene Betulin. <i>J. Agric. Food Chem.</i> 38(2): 493-494.
Cytotoxic 600 ppm					
Cytotoxic 8.6 uM					
Hypolipemic					
Prostaglandin-Synthesis-Inhibitor IC50=119 uM					Huang, C., Tunon, H., Bohlin, L. 1995. Anti-Inflammatory Compounds Isolated from <i>Menyanthes trifoliata</i> L. <i>Yao Hsueh Hsueh Pao</i> , 30(8): 621-626.
Topoisomerase-II-Inhibitor IC50=38.6 uM					
BETULIN	Fruit	--	--		Jim Duke's personal files.
Activities (13)					
AntiHIV 6.1 uM					
Anticarcinomic					
Antifeedant					
Antiflu					
Antiinflammatory					Recio, M., et al. 1994. Investigations on the Steroidal Anti-Inflammatory Activity of Triterpenoids from <i>Diospyros leucomelas</i> *. <i>Planta Medica</i> , 61: 9.
Antitumor					Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Antiviral 6.1 uM					
Aphidifuge					Lugemwa, F.N., Huang, F-Y., Bentley, M.D., Mendel, M.J., and Alford, A.R. 1990. A <i>Heliothis zea</i> Antifeedant from the Abundant Birchbark Triterpene Betulin. <i>J. Agric. Food Chem.</i> 38(2): 493-494.
Cytotoxic 600 ppm					

Hypolipemic

Prostaglandin-Synthesis-Inhibitor IC₅₀=119 uM Huang, C., Tunon, H., Bohlin, L. 1995. Anti-Inflammatory Compounds Isolated from *Menyanthes trifoliata* L. *Yao Hsueh Hsueh Pao*, 30(8): 621-626.

Topoisomerase-II-Inhibitor IC₅₀=38.6 uM

BETULINIC-ACID Stem Bark -- -- Jim Duke's personal files.

Activities (22)**Anthelmintic**

AntiHIV EC₅₀=2.0 ug/ml

Kashiwada, Y., et. al. 1998. Anti-AIDS Agents. 30. Anti-HIV Activity of Oleanolic Acid, Pomolic Acid, and Structurally Related Triterpenoids. *J. Nat. Prod.*, 61(9): 1090-1095.

AntiHIV IC₅₀=6.5 ug/ml

AntiHIV 14.8 uM

Antibacterial

Anticancer

Jeffery B. Harborne and H. Baxter, eds. 1983. *Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants*. Taylor & Frost, London. 791 pp.

Anticarcinomic

Jeffery B. Harborne and H. Baxter, eds. 1983. *Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants*. Taylor & Frost, London. 791 pp.

Antiedemic

Antiinflammatory

Recio, M., et al. 1994. Investigations on the Steroidal Anti-Inflammatory Activity of Triterpenoids from *Diospyros leucomelas**. *Planta Medica*, 61: 9.

Antileukemic

Antimalarial IC₅₀=19-26 ug/ml

New York Times, 3/28/95.

Antimelanomic

Antinociceptive

Antiplasmodial IC₅₀=19-26 ug/ml

Jeffery B. Harborne and H. Baxter, eds. 1983. *Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants*. Taylor & Frost, London. 791 pp.

Antitumor

Antiviral 14.8 uM

Apoptotic

Cytotoxic 50-100 ppm

Biosyn. Prod. Cancer Chemotherapy (Petit et al)

Cytotoxic 16.4 uM

Phospholipase-A2-Inhibitor

Prostaglandin-Synthesis-Inhibitor 200 ug/ml

Dunstan, C. A., Liu, B., Welch, C. J., Perera, P., Bohlin, L. 1998. Alphitol, a Phenolic Substance from *Alphitonia zizyphoides* which Inhibits Prostaglandin Biosynthesis in vitro. *Phytochemistry*, 48(3): 495-497.

Prostaglandin-Synthesis-Inhibitor IC₅₀=101 uM

Huang, C., Tunon, H., Bohlin, L. 1995. Anti-Inflammatory Compounds Isolated from *Menyanthes trifoliata* L. *Yao Hsueh Hsueh Pao*, 30(8): 621-626.

BETULINIC-ACID Pericarp -- 1900.0 -0.6 Pavannasasivam, G., & M.U.S. Sultanbawa. 1974. Betulinic acid in the Dilleniaceae and a review of its natural distribution. *Phytochem.* 13:2002-2006.

Activities (22)**Anthelmintic**

AntiHIV EC₅₀=2.0 ug/ml

Kashiwada, Y., et. al. 1998. Anti-AIDS Agents. 30. Anti-HIV Activity of Oleanolic Acid, Pomolic Acid, and Structurally Related Triterpenoids. *J. Nat. Prod.*, 61(9): 1090-1095.

AntiHIV IC₅₀=6.5 ug/ml

AntiHIV 14.8 uM

Antibacterial

Anticancer

Jeffery B. Harborne and H. Baxter, eds. 1983. *Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants*. Taylor & Frost, London. 791 pp.

Anticarcinomic

Jeffery B. Harborne and H. Baxter, eds. 1983. *Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants*. Taylor & Frost, London. 791 pp.

Antiedemic

Antiinflammatory

Recio, M., et al. 1994. Investigations on the Steroidal Anti-Inflammatory Activity of Triterpenoids from *Diospyros leucomelas**. *Planta Medica*, 61: 9.

Antileukemic

Antimalarial IC₅₀=19-26 ug/ml

New York Times, 3/28/95.

Antimelanomic

Antinociceptive

Antiplasmodial IC₅₀=19-26 ug/ml

Jeffery B. Harborne and H. Baxter, eds. 1983. *Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants*. Taylor & Frost, London. 791 pp.

Antitumor

Antiviral 14.8 uM

Apoptotic

Cytotoxic 50-100 ppm

Biosyn. Prod. Cancer Chemotherapy (Petit et al)

Cytotoxic 16.4 uM

Phospholipase-A2-Inhibitor

Prostaglandin-Synthesis-Inhibitor 200 ug/ml

Dunstan, C. A., Liu, B., Welch, C. J., Perera, P., Bohlin, L. 1998. Alphitol, a Phenolic Substance from *Alphitonia zizyphoides* which Inhibits Prostaglandin Biosynthesis in vitro. *Phytochemistry*, 48(3): 495-497.

Prostaglandin-Synthesis-Inhibitor IC₅₀=101 uM

Huang, C., Tunon, H., Bohlin, L. 1995. Anti-Inflammatory Compounds Isolated from *Menyanthes trifoliata* L. *Yao Hsueh Hsueh Pao*, 30(8): 621-626.

Activities (22)

Anthelmintic

AntiHIV EC50=2.0 ug/ml

Kashiwada, Y., et. al. 1998. Anti-AIDS Agents. 30. Anti-HIV Activity of Oleanolic Acid, Pomolic Acid, and Structurally Related Triterpenoids. J. Nat. Prod., 61(9): 1090-1095.

AntiHIV IC50=6.5 ug/ml

AntiHIV 14.8 uM

Antibacterial

Anticancer

Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.

Anticarcinomic

Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.

Antiedemic

Antiinflammatory

Recio, M., et al. 1994. Investigations on the Steroidal Anti-Inflammatory Activity of Triterpenoids from *Diospyros leucomelas**. Planta Medica, 61: 9.

Antileukemic

Antimalarial IC50=19-26 ug/ml

New York Times, 3/28/95.

Antimelanomic

Antinociceptive

Antiplasmodial IC50=19-26 ug/ml

Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.

Antitumor

Antiviral 14.8 uM

Apoptotic

Cytotoxic 50-100 ppm

Biosyn. Prod. Cancer Chemotherapy (Petit et al)

Cytotoxic 16.4 uM

Phospholipase-A2-Inhibitor

Prostaglandin-Synthesis-Inhibitor 200 ug/ml

Dunstan, C. A., Liu, B., Welch, C. J., Perera, P., Bohlin, L. 1998. Alphitol, a Phenolic Substance from *Alphitonia zizyphoides* which Inhibits Prostaglandin Biosynthesis in vitro. Phytochemistry, 48(3): 495-497.

Prostaglandin-Synthesis-Inhibitor IC50=101 uM

Huang, C., Tunon, H., Bohlin, L. 1995. Anti-Inflammatory Compounds Isolated from *Menyanthes trifoliata* L. Yao Hsueh Hsueh Pao, 30(8): 621-626.

BETULINIC- Leaf -- 6000.0 0.48 Jim Duke's personal files.
ACID

Activities (22)

Anthelmintic

AntiHIV EC50=2.0 ug/ml

Kashiwada, Y., et. al. 1998. Anti-AIDS Agents. 30. Anti-HIV Activity of Oleanolic Acid, Pomolic Acid, and Structurally Related Triterpenoids. J. Nat. Prod., 61(9): 1090-1095.

AntiHIV IC50=6.5 ug/ml

AntiHIV 14.8 uM

Antibacterial

Anticancer

Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.

Anticarcinomic

Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.

Antiedemic

Antiinflammatory

Recio, M., et al. 1994. Investigations on the Steroidal Anti-Inflammatory Activity of Triterpenoids from *Diospyros leucomelas**. Planta Medica, 61: 9.

Antileukemic

Antimalarial IC50=19-26 ug/ml

New York Times, 3/28/95.

Antimelanomic

Antinociceptive

Antiplasmodial IC50=19-26 ug/ml

Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.

Antitumor

Antiviral 14.8 uM

Apoptotic

Cytotoxic 50-100 ppm

Biosyn. Prod. Cancer Chemotherapy (Petit et al)

Cytotoxic 16.4 uM

Phospholipase-A2-Inhibitor

Prostaglandin-Synthesis-Inhibitor 200 ug/ml

Dunstan, C. A., Liu, B., Welch, C. J., Perera, P., Bohlin, L. 1998. Alphitol, a Phenolic Substance from *Alphitonia zizyphoides* which Inhibits Prostaglandin Biosynthesis in vitro. Phytochemistry, 48(3): 495-497.

Prostaglandin-Synthesis-Inhibitor IC50=101 uM

Huang, C., Tunon, H., Bohlin, L. 1995. Anti-Inflammatory Compounds Isolated from *Menyanthes trifoliata* L. Yao Hsueh Hsueh Pao, 30(8): 621-626.

BETULINIC- Heart -- -- Jim Duke's personal files.
ACID Wood

Activities (22)

Anthelmintic

AntiHIV EC50=2.0 uM

Kashiwada, Y., et. al. 1998. Anti-AIDS Agents. 30. Anti-HIV Activity of Oleanolic Acid, Pomolic Acid, and Structurally Related Triterpenoids. J. Nat. Prod., 61(9): 1090-1095.

AntiHIV IC50=6.5 ug/ml				
AntiHIV 14.8 uM				
Antibacterial				
Anticancer	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.			
Anticarcinomic	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.			
Antiedemic				
Antiinflammatory	Recio, M., et al. 1994. Investigations on the Steroidal Anti-Inflammatory Activity of Triterpenoids from <i>Diospyros leucomelas</i> *. <i>Planta Medica</i> , 61: 9.			
Antileukemic				
Antimalarial IC50=19-26 ug/ml				
Antimelanomic	New York Times, 3/28/95.			
Antinociceptive				
Antiplasmodial IC50=19-26 ug/ml				
Antitumor	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.			
Antiviral 14.8 uM				
Apoptotic				
Cytotoxic 50-100 ppm	Biosyn. Prod. Cancer Chemotherapy (Petit et al)			
Cytotoxic 16.4 uM				
Phospholipase-A2-Inhibitor				
Prostaglandin-Synthesis-Inhibitor 200 ug/ml	Dunstan, C. A., Liu, B., Welch, C. J., Perera, P., Bohlin, L. 1998. Alphitol, a Phenolic Substance from <i>Alphitonia zizyphoides</i> which Inhibits Prostaglandin Biosynthesis in vitro. <i>Phytochemistry</i> , 48(3): 495-497.			
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BETULINIC- Fruit -- -- Jim Duke's personal files.
ACID

Activities (22)

Anthelmintic				
AntiHIV EC50=2.0 ug/ml	Kashiwada, Y., et. al. 1998. Anti-AIDS Agents. 30. Anti-HIV Activity of Oleanolic Acid, Pomolic Acid, and Structurally Related Triterpenoids. <i>J. Nat. Prod.</i> , 61 (9): 1090-1095.			
AntiHIV IC50=6.5 ug/ml				
AntiHIV 14.8 uM				
Antibacterial				
Anticancer	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.			
Anticarcinomic	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.			
Antiedemic				
Antiinflammatory	Recio, M., et al. 1994. Investigations on the Steroidal Anti-Inflammatory Activity of Triterpenoids from <i>Diospyros leucomelas</i> *. <i>Planta Medica</i> , 61: 9.			
Antileukemic				
Antimalarial IC50=19-26 ug/ml				
Antimelanomic	New York Times, 3/28/95.			
Antinociceptive				
Antiplasmodial IC50=19-26 ug/ml				
Antitumor	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.			
Antiviral 14.8 uM				
Apoptotic				
Cytotoxic 50-100 ppm	Biosyn. Prod. Cancer Chemotherapy (Petit et al)			
Cytotoxic 16.4 uM				
Phospholipase-A2-Inhibitor				
Prostaglandin-Synthesis-Inhibitor 200 ug/ml	Dunstan, C. A., Liu, B., Welch, C. J., Perera, P., Bohlin, L. 1998. Alphitol, a Phenolic Substance from <i>Alphitonia zizyphoides</i> which Inhibits Prostaglandin Biosynthesis in vitro. <i>Phytochemistry</i> , 48(3): 495-497.			
Prostaglandin-Synthesis-Inhibitor IC50=101 uM	Huang, C., Tunon, H., Bohlin, L. 1995. Anti-Inflammatory Compounds Isolated from <i>Menyanthes trifoliata</i> L. <i>Yao Hsueh Pao</i> , 30(8): 621-626.			

BETULINIC- Bark -- 13000.0 1.06 *

Activities (22)

Anthelmintic				
AntiHIV EC50=2.0 ug/ml	Kashiwada, Y., et. al. 1998. Anti-AIDS Agents. 30. Anti-HIV Activity of Oleanolic Acid, Pomolic Acid, and Structurally Related Triterpenoids. <i>J. Nat. Prod.</i> , 61 (9): 1090-1095.			
AntiHIV IC50=6.5 ug/ml				
AntiHIV 14.8 uM				
Antibacterial				
Anticancer	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.			

Antiedemic				
Antiinflammatory	Recio, M., et al. 1994. Investigations on the Steroidal Anti-Inflammatory Activity of Triterpenoids from <i>Diospyros leucomelas</i> *. <i>Planta Medica</i> , 61: 9.			
Antileukemic				
Antimalarial IC50=19-26 ug/ml				
Antimelanomic	New York Times, 3/28/95.			
Antinociceptive				
Antiplasmodial IC50=19-26 ug/ml				
Antitumor	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp.			
Antiviral 14.8 uM				
Apoptotic				
Cytotoxic 50-100 ppm	Biosyn. Prod. Cancer Chemotherapy (Petit et al)			
Cytotoxic 16.4 uM				
Phospholipase-A2-Inhibitor				
Prostaglandin-Synthesis-Inhibitor 200 ug/ml	Dunstan, C. A., Liu, B., Welch, C. J., Perera, P., Bohlin, L. 1998. Alphitol, a Phenolic Substance from <i>Alphitonia zizyphoides</i> which Inhibits Prostaglandin Biosynthesis in vitro. <i>Phytochemistry</i> , 48(3): 495-497.			
Prostaglandin-Synthesis-Inhibitor IC50=101 uM	Huang, C., Tunon, H., Bohlin, L. 1995. Anti-Inflammatory Compounds Isolated from <i>Menyanthes trifoliata</i> L. <i>Yao Hsueh Hsueh Pao</i> , 30(8): 621-626.			

BETULINIC- Bark -- 7500.0 0.31 Jim Duke's personal files.
ACID

Activities (22)

Anthelmintic				
AntiHIV EC50=2.0 ug/ml	Kashiwada, Y., et. al. 1998. Anti-AIDS Agents. 30. Anti-HIV Activity of Oleanolic Acid, Pomolic Acid, and Structurally Related Triterpenoids. <i>J. Nat. Prod.</i> , 61 (9): 1090-1095.			
AntiHIV IC50=6.5 ug/ml				
AntiHIV 14.8 uM				
Antibacterial				
Anticancer	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp.			
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Antiedemic				
Antiinflammatory	Recio, M., et al. 1994. Investigations on the Steroidal Anti-Inflammatory Activity of Triterpenoids from <i>Diospyros leucomelas</i> *. <i>Planta Medica</i> , 61: 9.			
Antileukemic				
Antimalarial IC50=19-26 ug/ml				
Antimelanomic	New York Times, 3/28/95.			
Antinociceptive				
Antiplasmodial IC50=19-26 ug/ml				
Antitumor	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp.			
Antiviral 14.8 uM				
Apoptotic				
Cytotoxic 50-100 ppm	Biosyn. Prod. Cancer Chemotherapy (Petit et al)			
Cytotoxic 16.4 uM				
Phospholipase-A2-Inhibitor				
Prostaglandin-Synthesis-Inhibitor 200 ug/ml	Dunstan, C. A., Liu, B., Welch, C. J., Perera, P., Bohlin, L. 1998. Alphitol, a Phenolic Substance from <i>Alphitonia zizyphoides</i> which Inhibits Prostaglandin Biosynthesis in vitro. <i>Phytochemistry</i> , 48(3): 495-497.			
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BETULINIC- Wood -- 2500.0 0.92 *

Activities (22)

Anthelmintic				
AntiHIV EC50=2.0 ug/ml	Kashiwada, Y., et. al. 1998. Anti-AIDS Agents. 30. Anti-HIV Activity of Oleanolic Acid, Pomolic Acid, and Structurally Related Triterpenoids. <i>J. Nat. Prod.</i> , 61 (9): 1090-1095.			
AntiHIV IC50=6.5 ug/ml				
AntiHIV 14.8 uM				
Antibacterial				
Anticancer	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp.			
Anticarcinomic	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp.			
Antiedemic				
Antiinflammatory	Recio, M., et al. 1994. Investigations on the Steroidal Anti-Inflammatory Activity of Triterpenoids from <i>Diospyros leucomelas</i> *. <i>Planta Medica</i> , 61: 9.			
Antileukemic				
Antimalarial IC50=19-26 ug/ml				

Antinociceptive

Antiplasmodial IC₅₀=19-26 ug/ml

Antitumor Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.

Antiviral 14.8 uM

Apoptotic

Cytotoxic 50-100 ppm Biosyn. Prod. Cancer Chemotherapy (Petit et al)

Cytotoxic 16.4 uM

Phospholipase-A2-Inhibitor

Prostaglandin-Synthesis-Inhibitor 200 ug/ml Dunstan, C. A., Liu, B., Welch, C. J., Perera, P., Bohlin, L. 1998. Alphitol, a Phenolic Substance from *Alphitonia zizyphoides* which Inhibits Prostaglandin Biosynthesis in vitro. *Phytochemistry*, 48(3): 495-497.

Prostaglandin-Synthesis-Inhibitor IC₅₀=101 uM Huang, C., Tunon, H., Bohlin, L. 1995. Anti-Inflammatory Compounds Isolated from *Menyanthes trifoliata* L. *Yao Hsueh Hsueh Pao*, 30(8): 621-626.